

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION**

DRAFT

ORDER NO. R7-2009-0059
WASTE DISCHARGE REQUIREMENTS
FOR

HI-DESERT WATER DISTRICT, OWNER/OPERATOR
WATER RECLAMATION FACILITY
Town of Yucca Valley, San Bernardino County

The California Regional Water Quality Control Board, Colorado River Basin Region (Regional Water Board) finds that:

1. Hi-Desert Water District, 55439 29 Palms Hwy, Yucca Valley CA 92284 (hereinafter referred to as Discharger), submitted a draft Report of Waste Discharge dated September 24, 2008, for the waste discharge permit application. A site map of the facility (Attachment A) is incorporated herein and made part of this Order.
2. The Discharger is negotiating the design and construction of a wastewater collection system and reclamation facility that will replace the predominant use septic systems in the service area in a phased approach. The treated domestic wastewater will be discharged to two percolation ponds. The process schematic flow diagram of the wastewater treatment plant (Attachment B) is incorporated herein and made part of this Order.
3. A Memorandum of Agreement (MOA) dated June 25, 2008 was entered into by and among Town of Yucca Valley (Yucca Valley), the Hi-Desert Water District (District), and the California Regional Water Quality Control Boards, Colorado River Basin Region (Regional Water Board) (collectively, the Parties).
4. The MOA reflects the intent of the Parties to clarify the roles, duties, responsibilities, and commitments of each Party with respect to addressing groundwater contamination in and around Yucca Valley caused by septic tank treatment and subsurface disposal systems and with respect to a proposed municipal sewage treatment and water reclamation project.
5. The MOA reflects that Yucca Valley and the District recognize that septic tank treatment and subsurface disposal systems in Yucca Valley pose an on-going threat to water quality. The Parties agreed to coordinate efforts to address that threat in a cost-effective, timely, and comprehensive manner by constructing a municipal sewage treatment and water reclamation facility (hereinafter WRF).
6. The MOA reflects that the Parties agreed to implement a Phasing Schedule for the WRF project. The Parties understand that the Phasing Schedule may need to be adjusted from time to time due to a variety of factors, such as CEQA requirements, funding issues, government procedure requirements, and engineering considerations.

Wastewater Treatment System and Discharge

7. The design capacity of the proposed WRF is 2 million gallons per day (MGD). The WRF will include metering instrumentation, bar screening, grit removal, an extended aeration activated sludge system consisting of two anoxic/oxidation ditches, each capable of treating an average flow of 1 MGD, a secondary clarifier, filtration and UV disinfection of biologically treated wastewater, and sludge dewatering using belt filter presses. The anoxic/oxidation configuration promotes natural biological removal of nitrogen with no additional chemical requirements. A mixer will be furnished in the anoxic tank to provide gentle mixing of the mixed liquor to prevent settling. The oxidation ditches will be provided with two surface aerators.
8. Solids and sludge will be removed from the WRF by a licensed hauler, and disposed of in accordance with state regulation.
9. The Discharger proposes to use a State Certified Wastewater Treatment Plant Operator licensed to operate and maintain the WRF and disposal systems.
10. The WRF effluent will be disposed of via two on-site percolation ponds. Based upon the preliminary site plan, these percolation ponds are approximately 103,500 and 95,250 square feet in area. The percolation ponds are proposed to be approximately 6 feet in depth, with 2 feet assigned for normal operating conditions, 2 feet depth assigned for equalization storage to account for maximum day flows, and the remaining 2 feet reserved for freeboard. The design of the percolation ponds is based on a percolation water balance for an average flow of 2 MGD (or 6.14 ac-ft/day) at an assumed infiltration rate of 2.5 ft/day, and an assumed runoff area of 10 acres.

Hydrogeologic Conditions

13. Yucca Valley is located in the high desert portion of the Mojave Desert. The town's water supply is primarily groundwater from the Warren Valley Groundwater Basin (Basin), which is within the Joshua Tree Hydrologic Unit. The Basin includes the water-bearing sediments beneath the town of Yucca Valley and the surrounding area. The Basin is bounded on the north by the Pinto Mountain fault, on the south by the bedrock outcrop of the Little San Bernardino Mountains, on the east by a bedrock constriction called the "Yucca Barrier", and on the west by a topographic divide between Warren Valley and Morongo Valley (DWR 2004). The productive water-bearing materials in this basin consist of unconsolidated to partly consolidated Miocene to Quaternary continental deposits. The main productive water-bearing deposits are unconfined inter-bedded gravels, conglomerates, and silts deposited by alluvial fan systems. The site of the proposed WRF is at an average elevation of 3,200 feet above sea level, and is not in a FEMA designated 100-year flood plain.
14. The site is located in a seismically active desert region, approximately 2,500 feet south of the Pinto Mountain Fault Trace.
15. Average annual precipitation is about 10 inches.
16. A geotechnical investigation conducted at the site in _____ 200_ by _____ collected data from _____ borings, drilled ____ to ____ feet below ground surface (bgs). A

geotechnical engineering report dated _____ 200_, titled " _____ " indicated the following:

- a. The site is underlain by _____;
 - b. Subsurface soils are _____, and _____;
 - c. Groundwater _____.
17. A report of percolation test results entitled: "Soil Percolation Feasibility Report for the Proposed Percolation Ponds at the Hi-Desert Water District Water Reclamation Facility" dated _____, 200_, indicates that sufficient area exists for the treated wastewater disposal system in compliance with San Bernardino County regulations.
18. The Hi-Desert Water District (District) provides domestic water services to the Town of Yucca Valley and a portion of surrounding unincorporated area within the County of San Bernardino. The District currently pumps approximately 3,100 acre-ft/yr of groundwater, using 14 groundwater wells for water supply. The total capacity of the active wells is approximately 7,063 gpm or 10.17 MGD. The firm well capacity is defined as the combined capacity of all operational groundwater wells excluding the largest well. With the largest well offline (Well 12E with a capacity of 1,467 gpm or 2.11 MGD), the firm well capacity is 5,596 gpm or 8.06 MGD. District groundwater well data indicate that the depth to groundwater is approximately 380 feet below ground surface (bgs). The District's 200 Consumer's Confidence Report indicates that the following groundwater quality for the samples from the production wells collected in 200_:

<u>Constituent</u>	<u>Units</u>	<u>Average Concentration</u>	<u>Range of Concentrations</u>
Arsenic	µg/L ¹		
Chromium	µg/L		
Copper	mg/L ³		
Fluoride	mg/L		
Nitrate (as Nitrate, NO ₃)	mg/L		
Total Dissolved Solids	mg/L		
Chloride	mg/L		
Sulfate	mg/L		
Sodium	mg/L		

¹ Micrograms per liter, ² Non-detect, ³ Milligrams per liter

19. Most production wells in the Basin are owned and operated by the District. However, some private wells do exist such as those owned and operated by the Blue Skies Golf Course (BSGC) and the Institute of Mental Physics (IMP). Groundwater production in the Basin primarily occurs in the west, mid-west and mid-east subunits. Although groundwater is recharged both naturally and artificially, groundwater wells provide the sole source of potable water in the Basin.
20. The production well nearest to the proposed Facility is Well ___, which is more than ___ feet from the proposed infiltration ponds. In general, groundwater flows from areas of natural recharge (mountains on the north and south sides of the Basin) toward the axis of the east-west trending Basin, then eastwardly. Groundwater flow is influenced by the

bedrock configuration, faults, artificial recharge and pumping wells.

Basin Plan, Beneficial Uses, and Regulatory Considerations

21. Pursuant to the Porter-Cologne Water Quality Control Act (the Act), the State Water Resources Control Board and each of the nine Regional Water Quality Control Boards (Regional Water Boards) are the principal state agencies charged with protecting the quality of the waters of the state. Such waters are broadly defined, and include surface and ground waters. In furtherance of this legislative mandate, the Regional Water Boards are required to formulate and adopt water quality control plans (Basin Plans) for all waters within their respective jurisdictional regions. The Water Quality Control Plan for the Colorado River Basin Region of California (Basin Plan), as amended to date, designates the beneficial uses of groundwater and surface water in the Region.
22. Based on a United States Geological Survey (USGS) study, and on-going water quality information reported by the District concerning the water quality of its groundwater supply wells, the Regional Water Board has concluded that the septic tank treatment and subsurface disposal systems in Yucca Valley have caused actual and threatened impacts to areal groundwater supplies in Yucca Valley and vicinity. To address these water quality impacts, Regional Water Board staff are preparing a proposed amendment to the Basin Plan.
23. The designated beneficial uses of groundwater in the Basin include:
 - a. Municipal supply (MUN), and
 - b. Industrial supply (IND),
24. Waste Discharge Requirements (WDRs) implement narrative and numeric water quality objectives for ground and surface waters established by the Basin Plan. The numeric objectives for groundwater designated for municipal and domestic supply are the maximum contaminant levels (MCLs), and bacteriological limits specified in Section 64421 et seq. of Title 22, California Code of Regulations (CCR). The narrative objectives are:

"Ground water...shall not contain taste or odor producing substances in concentrations that adversely affect beneficial uses as a result of human activity."
(Basin Plan, page 3-8).

"Discharges of water softener regeneration brines...to disposal facilities which ultimately discharge in areas where such wastes can percolate to ground water usable for domestic and municipal purposes are prohibited." (Basin Plan, page 3-8).
25. The discharge authorized by this Board Order, and treatment and storage facilities associated with discharges of treated municipal wastewater, except for discharges of residual sludge and solid waste, are exempt from the solid waste requirements of Title 27, CCR, Section 20005 et seq. (hereinafter Title 27). This exemption is based on Section 20090(b) of Title 27, which states in relevant part that discharges of sewage or treated effluent are exempt provided discharges satisfy the following:
 - a. Wastes consist primarily of domestic sewage and treated effluent;

- b. Wastes are regulated by a Board adopted WDR, or a WDR waiver;
- c. WDRs are consistent with applicable water quality objectives; and
- d. Treatment and disposal facilities described herein are associated with a municipal wastewater treatment plant.

Anti-Degradation Policy

- 26. State Water Resources Control Board (State Water Board) Resolution No. 68-16 ("Policy with Respect to Maintaining High Quality Waters of the State") (hereinafter Resolution No. 68-16) requires a Regional Water Board in regulating the discharge of waste to maintain high quality waters of the state (i.e., background water quality) until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than as described in plans and policies (e.g., violation of any water quality objective). Moreover, the discharge is required to meet WDRs that result in the best practicable treatment or control (BPTC) of the discharge necessary to assure pollution or nuisance will not occur, and highest water quality consistent with maximum benefit to the people will be maintained.
- 27. Some degradation of groundwater from the discharge to the percolation ponds is consistent with Resolution No. 68-16, provided that this degradation:
 - a. Is confined to a reasonable area;
 - b. Is minimized by means of full implementation, regular maintenance, and optimal operation of (BPTC) measures;
 - c. Is limited to waste constituents typically encountered in domestic wastewater; and
 - d. Does not result in the loss of any beneficial use as prescribed in the applicable basin plan, or violation of any water quality objective.
- 28. The discharge of treated wastewater from the proposed WRF, as permitted herein, reflects best practicable treatment and control. The controls assure the discharge does not create a condition of pollution or nuisance, and that water quality will be maintained which is consistent with the anti-degradation provisions of Resolution No. 68-16. The proposed WRF will incorporate:
 - a. Technology for secondary treated domestic wastewater;
 - b. Sludge handling facilities;
 - c. An operation and maintenance manual;
 - d. Staffing to assure proper operation and maintenance; and
 - e. A standby emergency power generator of sufficient size to operate the treatment plant and ancillary equipment during periods of loss of commercial power.

29. Constituents in the WRF effluent that present the greatest risk to groundwater quality are nitrogen, coliforms (pathogen-indicator organisms), and dissolved salts. The proposed WRF will provide substantial removal of soluble organic matter, solids, and nitrogen. While secondary treatment reduces fecal coliform densities by 90 to 99%, the remaining organisms in effluent are still 10^5 to 10^6 MPN/100 ml (United States Environmental Protection Agency, Design Manual, Municipal Wastewater Disinfection; October 1986). Given the depth to groundwater (approximately 380 feet bgs) and soil types beneath the percolation ponds, effluent disinfection is not needed to prevent pathogen-indicator bacteria from reaching groundwater at densities exceeding those prescribed in Title 22, CCR. Therefore, degradation to groundwater, if any, should be limited to the area underlying the percolation ponds, and to nitrogen and salinity constituents.
30. The typical incremental addition of dissolved salts from domestic water usage is 150 to 380 mg/L. Considering current water conservation practices, the TDS increase allowed for this project is 300 mg/L. An average limitation of 530 mg/L for TDS in effluent, limits salt degradation to a reasonable amount (300 mg/L over the average TDS of municipal water supply), and reasonably protects present, and anticipated, future beneficial uses of groundwater.
31. Groundwater limits equal to water quality objectives for indicator waste constituents are appropriate, as well as a more restrictive limit for TDS in groundwater than that prescribed by Title 22, CCR. The limited increase in TDS is consistent with maximum benefit to the people of the State. Accordingly, the discharge as authorized is consistent with the anti-degradation provisions of Resolution 68-16.

Storm Water

32. Federal regulations for storm water discharges were promulgated by the United States Environmental Protection Agency (USEPA; 40 CFR Parts 122, 123, and 124). The regulations require specific categories of facilities discharging storm water associated with industrial activity to obtain National Pollutant Discharge Elimination System (NPDES) permits and to implement Best Conventional Pollutant Technology and Best Available Technology Economically Achievable to reduce or eliminate industrial storm water pollution.
33. The State Water Board adopted Order No. 97-03-DWQ (General Permit No. CAS000001), specifying WDRs for discharges of storm water associated with industrial activities, excluding construction activities, and requiring submittal of a Notice of Intent by industries to be covered under the General Permit.

California Environmental Quality Act

34. In a jointing meeting held on June 13, 2007, the Yucca Valley Town Council and the District's Board of Directors formally recognized their coordination objectives by affirmatively voting to make the construction of a municipal WRF their highest priority. They also voted to have the District be lead agency for the municipal WRF, including acting as lead agency for conducting environmental review required by CEQA.
35. As of the effective date of this Order, the District, as lead agency under CEQA,

conducted an initial study for the municipal WRF, Administrative review of the CEQA document has been completed on ____ 2009. Following administrative review, the District issued a Notice of Determination of its intent to adopt a Mitigated Negative Declaration for the WRF for public review and comment.

36. The Board has notified the Discharger and all known interested agencies and persons of its intent to draft WDRs for this discharge, and has provided them with an opportunity for a public meeting and an opportunity to submit comments.
37. Pursuant to California Water Code Section 13263(g), the discharge of waste is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.
38. The Board, in a public meeting held on ____ 2009, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, that in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, the Discharger shall comply with the following:

A. Discharge Specifications

1. The 30-day monthly average daily discharge from the WRF shall not exceed 4 mgd.
2. Effluent from the WRF shall not have a pH below 6.0 or above 9.0.
3. The treatment or disposal of wastes from the WRF shall not cause pollution or nuisance as defined in Sections 13050(l) and 13050(m) of Division 7 of the California Water Code.
4. Public contact with wastewater and the subsurface disposal areas shall be precluded or controlled through fences, signs, or other acceptable alternatives.
5. The discharge shall not cause degradation of any water supply unless in compliance with Resolution No. 68-16, as described in Finding No. 29..
6. All treatment, storage, and disposal areas shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
7. Operation of the WRF shall not cause pollution or nuisance as defined in Sections 13050(l) and 13050(m) of Division 7 of the California Water Code.
8. Effluent from the WRF shall not exceed the following effluent limits:

Constituent	Units	Monthly Average	Weekly Average	Daily Maximum
BOD ₅ ¹	mg/L	30	45	65

Total Suspended Solids	mg/L	30	45	65
Nitrogen (as Total Nitrogen)	mg/L	10	15	20
Total Dissolved Solids (TDS)	mg/L	530	--	--
¹ 5-day biochemical oxygen demand at 20 °C.				

B. Discharge Prohibitions

1. Discharge of wastes to surface waters or surface water drainage courses is prohibited.
2. Discharge of waste classified as 'hazardous,' as defined in Title 23, CCR, Section 2521(a), or 'designated,' as defined in California Water Code Section 13173, is prohibited.
3. Bypass or overflow of untreated or partially treated waste is prohibited, except as allowed in Provision E.12.
4. Discharge of waste at any point upstream of the WRF is prohibited.
5. Discharge of wastewater from the WRF, other than into the percolation ponds described in Finding No. 10 , above, is prohibited.
6. The WRF and percolation ponds shall be maintained to prohibit sewage or treated effluent from surfacing or overflowing.

C. Sludge Disposal

1. Disposal of oil and grease, bio-solids, screenings, and other solids collected from liquid wastes shall be pursuant to Title 27, and the review and approval of the Regional Water Board Executive Officer.
2. Any proposed change in use or disposal of bio-solids requires the approval of the Regional Water Board Executive Officer, and U.S. Environmental Protection Agency Regional Administrator, who must be notified at least 90 days in advance of the change.
3. Sludge use and disposal shall comply with Federal and State laws and regulations, including permitting requirements, and technical standards in 40 CFR Part 503. If the State and Regional Water Boards are delegated the authority to implement 40 CFR Part 503 regulations, this Order may be revised to incorporate appropriate time schedules and technical standards. The Discharger shall comply with the standards and time schedules in 40 CFR part 503, whether or not part of this Order.

D. Groundwater Limitations

1. Infiltration of waste constituents from the percolation ponds shall not cause groundwater to:
 - a. Contain constituents in excess of the following concentrations:

Constituent	Units	Limitation
Ammonia (as NH ₄)	mg/L	1.5
Boron	mg/L	0.7
Chloride	mg/L	100
Iron	mg/L	0.3
Manganese	mg/L	0.05
Sodium	mg/L	60
Total Coliform Organisms	MPN ¹ /100 mL	< 2.2
Total Dissolved Solids	mg/L	Background concentration + 300
Nitrite (as N)	mg/L	1
Nitrate (as N)	mg/L	10
¹ Most Probable Number		

- b. Exhibit a pH of less than 6.0 or greater than 9.0 pH units.
 - c. Acquire taste, odor, toxicity, or color that creates nuisance or impairs beneficial use.

E. Provisions

1. The Discharger shall comply with Monitoring and Reporting Program (MRP) No. R7-2009-0059, and future revisions thereto, as specified by the Regional Water Board Executive Officer.
2. Given the monitoring frequency prescribed by MRP No. R7-2009-0059, if only one sample is available for a given reporting period, compliance with monthly average, or weekly average Discharge Specifications, will be determined from that sample.
3. Prior to implementing a modification that results in a material change in the quality or quantity of wastewater treated or discharged, or a material change in the location of discharge, the Discharger shall report all pertinent information in writing to the Regional Water Board, and obtain revised requirements.
4. Prior to a change in ownership or management of the WRF, the Discharger shall transmit a copy of this Board Order to the succeeding owner/operator, and forward a copy of the transmittal letter to the Regional Water Board.
5. The Discharger shall ensure that all site-operating personnel are familiar with the content of this Board Order, and shall maintain a copy of this Board Order at the site.

6. This Board Order does not authorize violation of any federal, state, or local laws or regulations.
7. Standby power generating facilities shall be available to operate the plant during a commercial power failure.
8. The Discharger shall comply with all of the conditions of this Board Order. Noncompliance is a violation of the Porter-Cologne Water Quality Control Act (Cal. Water Code, § 13000 et seq.), and grounds for enforcement action.
9. At least 30 days prior to beginning WRF operations and waste discharge, the Discharger shall submit an engineering report pursuant to Section 13267 of the California Water Code. The report shall be prepared by a registered civil engineer experienced in the design of domestic wastewater treatment and disposal facilities, and describe:
 - a. The as-built WRF and disposal systems;
 - b. The type and location of flow metering instruments installed to comply with the effluent flow limit, and MRP No. R7-2009-0059;
 - c. Construction specifications of the percolation ponds; the area covered by the percolation ponds, and available standby area for 100% replacement of the percolation ponds;
 - d. A map to scale (1 inch = 200 feet, or less) providing the location of the WRF, disposal area, and property boundaries;
 - e. Certification that the facilities were designed and built to comply with this order; and
 - f. The Operation and Maintenance (O&M) Plans for WRF, and subsurface disposal areas, which shall:
 - i. Instruct field personnel to manage daily discharge operations to comply with the terms and conditions of this Order, and make field adjustments to prevent nuisance conditions (e.g., surfacing water);
 - ii. Include nuisance condition troubleshooting flowcharts for the WRF and disposal areas, and notification requirements in case of an emergency;
 - iii. Include an Inspection and Maintenance Plan describing the procedures and schedule for inspecting and testing the WRF, and necessary maintenance; and
 - iv. Provide instructions to determine when to remove grease/scum/sludge from the WRF, and proper procedures for disposal of removed solids.
10. The Discharger shall at all times properly operate and maintain all systems and components of collection, treatment and control, installed or used by the Discharger to achieve compliance with this Board Order. Proper operation and maintenance includes effective performance, adequate process controls, and appropriate quality assurance

procedures. This provision requires the operation of backup or auxiliary facilities/systems when necessary to achieve compliance with this Board Order. All systems in service or reserved shall be inspected and maintained on a regular basis. Records of inspections and maintenance shall be retained, and made available to the Regional Water Board Executive Officer on request.

11. The Discharger shall report orally, any noncompliance that may endanger human health or the environment. The noncompliance shall be reported immediately to the Regional Water Board Executive Officer, and the Office of Emergency Services as soon as:
 - a. the Discharger has knowledge of the discharge,
 - b. notification is possible, and
 - c. notification will not substantially impede cleanup or other emergency measures.

During non-business hours, the Discharger shall leave a message on the Regional Water Board office voice recorder. A written report shall be provided within five (5) business days the Discharger is aware of the incident. The written report shall include a description of the noncompliance, the cause, period of noncompliance, anticipated time to achieve full compliance, and steps taken or planned, to reduce, eliminate, and prevent recurrence of the noncompliance. The Discharger shall report all intentional or unintentional spills occurring within the facility or collection system to the Regional Water Board office in accordance with the above time limits.

12. By-pass (i.e., the intentional diversion of waste streams from any portion of the treatment facilities, except diversions designed to meet variable effluent limits) is prohibited. The Water Board may take enforcement action against the Discharger for by-pass unless:
 - a. (1) By-pass was unavoidable to prevent loss of life, personal injury, or severe property damage. Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to be inoperable, or substantial and permanent loss of natural resources reasonably expected to occur in the absence of a by-pass. Severe property damage does not mean economic loss caused by delays in production; and
 - (2) There were no feasible alternatives to by-pass, such as the use of auxiliary treatment facilities or retention of untreated waste. This condition is not satisfied if adequate back-up equipment was not installed to prevent by-pass occurring during equipment downtime, or preventive maintenance;
 - b. (1) By-pass is required for essential maintenance to assure efficient operation; and
 - (2) Neither effluent nor receiving water limitations are exceeded; and
 - (3) The Discharger notifies the Board ten (10) days in advance.

The Discharger shall submit notice of an unanticipated by-pass as required in paragraph E.11 above.

13. The Discharger shall allow the Regional Water Board, or an authorized representative,

upon presentation of credentials and other documents as may be required by law, to:

- a. Enter the premises regulated by this Board Order, or the place where records are kept under the conditions of this Board Order;
- b. Have access to and copy, at reasonable times, records kept under the conditions of this Board Order;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Board Order; and
- d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Board Order or as otherwise authorized by the California Water Code, any substances or parameters at this location.

15. The Discharger shall comply with the following:

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- b. The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Board Order, and records of all data used to complete the application for this Board Order, for a period of at least five (5) years from the date of the sample, measurement, report or application.
- c. Records of monitoring information shall include:
 - (1) The date, exact place, and time of sampling or measurement;
 - (2) The individual who performed the sampling or measurement;
 - (3) The date the analysis was performed;
 - (4) The individual performing the analysis;
 - (5) The analytical technique or method used; and
 - (6) The result of the analysis.

16. Unless otherwise approved by the Regional Water Board Executive Officer, all analyses shall be conducted at a laboratory certified for such analyses by the California Department of Public Health. All analyses shall be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants", promulgated by the United States Environmental Protection Agency.

17. The Discharger is the responsible party for the WDRs and the Monitoring and Reporting Program (MRP) for the facility. The Discharger shall comply with all conditions of these WDRs. Violations may result in enforcement action, including Regional Water Board orders or court orders that require corrective action or impose civil monetary liability, or modification or revocation of these WDRs by the Regional Water Board.

18. The Discharger shall provide adequate notice to the Regional Water Board Executive

Officer of the following:

- a. The introduction of pollutants into any treatment facility described in the Findings of this Board Order from an indirect Discharger which would be subject to Section 301 or 306 of the Clean Water Act, if the pollutants were discharged directly
 - b. Any substantial change in the volume or character of pollutants introduced into any treatment facility described in the Findings of this Board Order, by an existing or new source; and
 - c. Any planned physical alteration or addition to the facilities described in this Board Order, or change planned in the Discharger's sludge use or disposal practice, where such alterations, additions, or changes may justify the application of Board Order conditions that are different from or absent in the existing Board Order, including notification of additional disposal sites not reported during the Board Order application process, or not reported pursuant to an approved land application plan.
19. The Discharger shall report all instances of noncompliance. Reports of noncompliance shall be submitted with the Discharger's next scheduled self-monitoring report or earlier if requested by the Regional Water Board Executive Officer, or if required by an applicable standard for sludge use and disposal.
 20. The Discharger shall apply for coverage under the NPDES General Permit for storm water discharges from construction activities for the site.
 21. Adequate measures shall be taken to assure that flood or surface drainage waters do not erode or otherwise render portions of the discharge facilities inoperable.
 22. The Discharger shall maintain a permanent log of all solids hauled away from the treatment facility for use/disposal elsewhere and shall provide a summary of the volume, type (screenings, grit, raw sludge, digested sludge), use (agricultural, composting, etc.), and the destination in accordance with the MRP of this Board Order.
 23. This Board Order does not convey property rights of any sort, or exclusive privileges, nor does it authorize injury to private property or invasion of personal rights, or infringement of federal, state, or local laws or regulations.
 24. This Board Order may be modified, rescinded, or reissued, for cause. The filing of a request by the Discharger for a Board Order modification, rescission or reissuance, or notification of planned changes or anticipated noncompliance, does not stay any Board Order condition. Causes for modification include a change in land application plans, or sludge use or disposal practices, and adoption of new regulations by the State or Regional Water Board (including revisions to the Basin Plan), or Federal government.

I, Robert Perdue, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on _____, 2009.

Hi-Desert Water District
Water Reclamation Facility

Board Order No. R7-2009-0059
Waste Discharge Requirements

Ordered by: _____
ROBERT PERDUE
Executive Officer

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION
DRAFT**

**MONITORING AND REPORTING PROGRAM NO. R7-2009-0059
FOR
HI-DESERT WATER DISTRICT, OWNER/OPERATOR
WATER RECLAMATION FACILITY
Town of Yucca Valley, San Bernardino County**

Location of the Facility (Latitude/Longitude): 34°7'32.76" N / 116°22'34.80" W
Location of the Discharge Point (Latitude/Longitude): 34°7'46.75" N / 116°22'34." W

MONITORING

1. The collection, preservation and holding times of all samples shall be in accordance with United States Environmental Protection Agency (USEPA) approved procedures. Unless otherwise approved by the Regional Water Board Executive Officer, all analyses shall be conducted by a laboratory certified by the California Department of Public Health. All analyses shall be conducted in accordance with the latest edition of the "Guidelines Establishing Test Procedures for Analysis of Pollutants" (40 CFR Part 136), promulgated by the USEPA.
2. Samples shall be collected at the locations specified in the Permit. If no locations are specified, sampling shall be conducted at the most representative sampling points available.
3. If the facility is not in operation, or there is no discharge during a required reporting period, the Discharger shall forward a letter to the Regional Water Board indicating no activity during the required reporting period.

TREATED WASTEWATER DICHARGE TO PERCOLATION PONDS

The Discharger shall monitor the treated wastewater discharged to the percolation ponds for the following:

Constituents	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Flow to Pond 1	gpd ¹	measurement	Weekly ³	Monthly
Flow to Pond 2	gpd ¹	measurement	Weekly ³	Monthly
TDS	mg/L ²	grab	Monthly	Monthly
1 Gallons per day (average daily flow calculated from meter readings)				
2 Milligrams per liter				
3 Average daily flow calculated from weekly meter readings				

WASTEWATER TREATMENT FACILITY EFFLUENT

The Discharger shall monitoring effluent from the wastewater treatment facility effluent according to the following schedule:

Constituents	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Flow	gpd ²	Measurment ³	Weekly	Monthly
pH	pH units	Grab	Monthly	Monthly
20° C BOD ₅	mg/L	Grab	Monthly	Monthly
Suspended Solids	mg/L	Grab	Monthly	Monthly
Settleable Solids	mg/L	Grab	Monthly	Monthly
Nitrite (NO ₂ -N) as Nitrogen	mg/L	Grab	Monthly	Monthly
Nitrate (NO ₃ -N) as Nitrogen	mg/L	Grab	Monthly	Monthly
Total Nitrogen	mg/L	Grab	Monthly	Monthly
Total Dissolved Solids	mg/L	Grab	Monthly	Monthly
VOCs ⁴	µg/L	Grab	Annually	Annually

¹ When analysis shows noncompliance with the limitations prescribed by Discharge Specification No. B.9, the Discharger shall increase the sampling frequency, for the constituent(s) in noncompliance, to one (1) sample per week, and continue sampling at that minimum frequency until either (a) the sampling shows compliance for two (2) consecutive months or (b) the Executive Officer authorizes the Discharger to resume the normal sampling schedule.

² Gallons per day

³ Average daily flow calculated from weekly meter readings.

⁴ Volatile Organic Compounds

PRODUCTION WELL WATER SUPPLY

The Discharger shall establish a sampling program to analyze representative samples of production well water supplied to the HI-Desert Water District; and shall provide written notification of the proposed sampling program to the Executive Officer for review and approval. At a minimum, the production well water supply shall be monitored for the following:

Constituents	Units	Sampling Frequency
TDS	mg/L	Monthly
pH	pH units	Monthly
Standard Minerals ¹	mg/L	Annually
¹ Standard Minerals shall include, at a minimum, the following elements/compounds: Calcium, Magnesium, Nitrogen, Potassium, Sulfate, Total Alkalinity (including alkalinity series), and Hardness		

GROUNDWATER MONITORING

The discharger shall establish a groundwater monitoring program to assess the impacts of the percolate on the native groundwater system. At a minimum, the monitoring program shall include one monitoring well upstream of the percolation ponds, and two monitoring wells located downstream the percolation ponds.

The Discharger shall monitoring groundwater according to the following schedule:

Constituents	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Ammonia (as NH ₄)	mg/L	Grab	Quarterly	Quarterly
Boron	mg/L	Grab	Quarterly	Quarterly
Chloride	mg/L	Grab	Quarterly	Quarterly
Iron	mg/L	Grab	Quarterly	Quarterly
Manganese	mg/L	Grab	Quarterly	Quarterly
Sodium	mg/L	Grab	Quarterly	Quarterly
Total Coliform Organisms	MPN/ 100 ml	Grab	Quarterly	Quarterly
Nitrate (NO ₃ ⁻ N) as Nitrogen	mg/L	Grab	Quarterly	Quarterly
Total Nitrogen	mg/L	Grab	Quarterly	Quarterly
Total Dissolved Solids	mg/L	Grab	Quarterly	Quarterly
² VOCs	µg/L	Grab	Annually	Annually
¹ MPN : Most Probable Number ² Volatile Organic Compounds				

REPORTING

1. The Discharger shall arrange the data in tabular form so that the specified information is readily discernible. The data shall be summarized in such a manner as to clearly illustrate whether the facility is operating in compliance with Waste Discharge Requirements (WDRs). Where appropriate, the Discharger shall include supporting calculations (e.g., for monthly averages).
2. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurement;
 - b. The individual performing the sampling or measurement;
 - c. The date the analysis was performed;
 - d. The individual performing the analysis;
 - e. The analytical technique or method used; and
 - f. The result of the analysis.

3. The result of any analysis taken more frequently than required at the locations specified in this Monitoring and Reporting Program (MRP) shall be reported to the Regional Water Board.
4. Monitoring reports shall be certified under penalty of perjury to be true and correct, and shall contain the required information at the frequency designated in this MRP.
5. Each report shall contain the following statement:

"I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations".
6. The MRP, and other information requested by the Regional Water Board, shall be signed by a principal executive officer or ranking elected official.
7. A duly authorized representative of the Discharger may sign the documents if:
 - a. Authorization is made in writing by the person described above;
 - b. Authorization specifies an individual or person having responsibility for the overall operation of the regulated disposal system; and
 - c. Written authorization is submitted to the Regional Water Board Executive Officer.
8. Reporting a failure in the facility (wastewater treatment plant, and collection and disposal systems) shall be as described in Provision No. 11. Results of analyses performed for this purpose shall be provided within 15 days of sample collection.
9. The Discharger shall attach a cover letter to the Self Monitoring Report. The cover letter shall clearly identify WDR violations, discuss corrective actions taken or planned, and propose a time schedule for corrective action (if applicable). Identified violations shall describe the requirement violated, and the nature of the violation.
10. Daily, weekly and monthly monitoring reports shall be submitted to the Regional Water Board by the 15th day of the following month. Quarterly monitoring reports shall be submitted to the Regional Water Board by January 15th, April 15th, July 15th, and October 15th, of each year. Annual monitoring reports shall be submitted to the Regional Water Board by January 15th of each year.
11. The Discharger shall submit monitoring reports to:

California Regional Water Quality Control Board
Colorado River Basin Region
73-720 Fred Waring, Suite 100
Palm Desert, CA 92260

Hi-Desert Water District
Water Reclamation Facility

Board Order No. R7-2009-0059
Monitoring And Reporting Program

Ordered by: _____

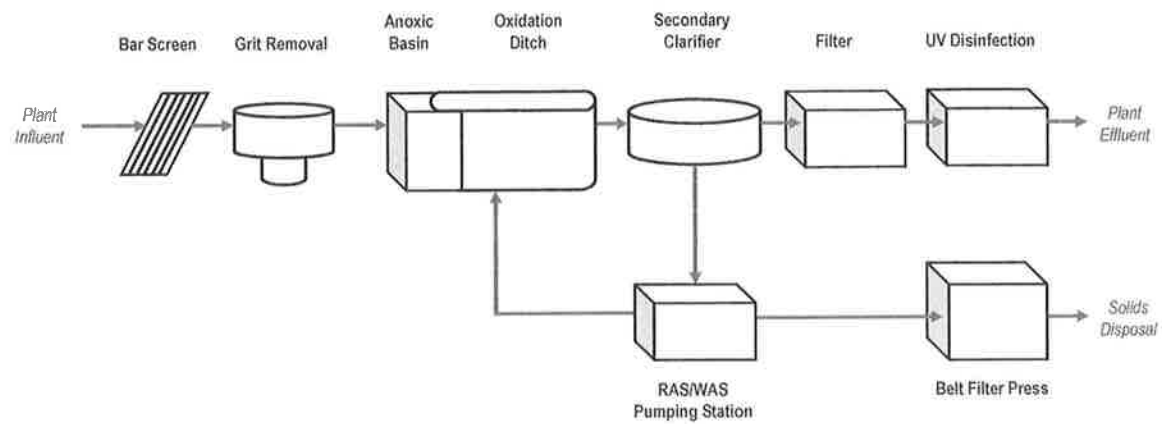
ROBERT PERDUE
Executive Officer

_____, 2009
Date



Attachment A

Site Map of the Hi-Desert Water District Water Reclamation Facility



Attachment B

Schematic Flow Diagram of the Hi-Desert Water District Water Reclamation Facility